REMARKS

This communication is responsive to the Office Action dated July 13, 2007. Reexamination and reconsideration are respectfully requested.

Telephone Interview of October 30, 2007

Applicant notes with appreciation the courtesy of Examiner Gupta in extending the opportunity for a telephone interview including the undersigned representative Christopher Tobin and Frank Battaglia on October 30, 2007. The claims and references relied-upon in the Office Action dated July 13, 2007 were discussed in the personal interview. As understood by Applicant, Examiner Gupta expressed agreement that the limitations recited in claim 2 are not taught or suggested by any of the currently relied-upon references. Accordingly, Applicant respectfully requests that the outstanding rejection of this claim under 35 U.S.C. § 102 be formally withdrawn. Applicant also requests reconsideration and withdrawal of the remaining claim rejections, as discussed in the interview, for the reasons set forth in the following remarks.

Rejected Claims

Claim 15 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. This rejection is traversed.

Claim 15 is drawn to "[a] computer program product stored on a computer-readable medium."

> When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. . . . When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim.

MPEP § 2106.01. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 15 under 35 U.S.C. § 101.

Claims 1, 3, 5-6, and 12-15 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Pat. No. 6,295,409 to Ikeda ("Ikeda"). This rejection is traversed.

Ikeda teaches an apparatus for simultaneously recording two channels of video data onto a single optical disc. (Ikeda, Abstract). The apparatus of Ikeda apparently operates by utilizing two buffers which are constantly being filled by the video channels, and a recording head which can record data at over 2x the data rate of either video channel. The recording head alternates between recording the data from the first buffer and recording data from the second buffer, to separate locations on the optical disc. (Ikeda, 2:55-3:8). While Ikeda may describe a type of recording device, it fails to teach or suggest the features of Applicant's invention.

With regard to Applicant's claim 1, Ikeda fails to teach or suggest all of the features recited in Applicant's claim. For example, Ikeda fails to teach or suggest "readout means for collectively reading out said data recorded on said information recording medium in units of a predetermined amount of data while the recording by said recording means is in progress." In addition to simultaneously recording two tracks and simultaneously reading two tracks, Applicant's invention also includes reading the data recorded on the medium (e.g., the low-resolution track) while simultaneously recording to the medium. This claimed functionality is absent from the teachings of Ikeda. Ikeda merely teaches simultaneous recording of multiple tracks to the medium, (Ikeda, e.g. at 2:10-17), and the simultaneous reading of multiple tracks from the medium, (Ikeda, at 5:19-26). Therefore this claim 1 is patentable over Ikeda for at least this reason. Furthermore, claims 2, 3, 5, 6, and 12, which are dependent on claim 1 and incorporate all of the limitations therein, are also patentable over Ikeda for at least this reason.

Claims 13, 14, and 15 all contain a similar limitation as that discussed in claim 1:

> *a readout step of collectively reading out said data recorded on the [said] information recording medium in units of a predetermined amount of data while the recording in said recording step is in progress*

For at least similar reasons to those discussed regarding claim 1, these three claims are also patentable over Ikeda.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 3, 5-6, and 12-15 35 U.S.C. § 102.

Claims 7-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikeda in view of U.S. Pat. No. 6,937,549 to Nozaki ("Nozaki"). This rejection is traversed.

Nozaki describes a system for managing table of contents ("TOC") information for a multi-session CD-R. (Nozaki, Abstract). According to Nozaki, an external nonvolatile memory is used to store the TOC information associated with a CD-R. (Nozaki, 7:25-29). The nonvolatile memory also stores a unique disc identifier ("disc ID") associated with this TOC information. (Nozaki, 7:25-29). When a CD-R is finalized, the recording device retrieves the proper TOC information (corresponding to the proper disc ID) from the nonvolatile memory and records the retrieved TOC information to the CD-R. (Nozaki, 7:30-33). Nozaki, even viewed in combination with Ikeda, fails to teach or suggest all of the features recited in Applicant's claims.

For example, with regard to Applicant's claim 7, neither Nozaki nor Ikeda teach or suggest "verification means for verifying the recording on said information recording medium based on said data stored by said storage means." As described in Applicant's specification, for example at paragraphs 100-102, Applicant's invention may include a means for comparing the data that has been recorded onto the medium with the data that remains in the storage buffer. By comparing this data, Applicant's invention can verify the integrity of the data that has been recorded on the medium.

Nozaki does not teach any such verification means. Nozaki may teach reading some information (e.g., the disc ID) from the medium and using this information to *access* the TOC information stored in the nonvolatile memory. However, the data stored on the CD-R is never *verified* based on the stored TOC information. The cited passages (Nozaki, 11:8-48) merely describe the TOC information being used to (1) record the TOC information to the disc; and (2) display the stored TOC information to a user when a disc is not present. Neither of these can

reasonably be interpreted as verifying the information recorded on the CD-R (the information already stored on the CD-R is not accessed in either of these processes).

Therefore Applicant's claim 7 is patentable over this combination for at least these reasons. Furthermore, claims 8 and 9, which are dependent on claim 7 and incorporate all of the limitations therein, are also patentable over this combination of references for at least this reason.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 7-9 under 35 U.S.C. § 103(a).

Claims 4 and 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ikeda in view of U.S. Pat. App. 2003/0161233 of Sako et al. ("Sako"). This rejection is traversed.

Sako describes a system for recording data in multiple addressing formats on a single optical disc. (Sako, Abstract). This is achieved largely through specific data structures stored in one of the data areas. (Sako, Figs. 2-5). Sako, even viewed in combination with Ikeda, fails to teach or suggest all of the features recited in Applicant's claims.

With regard to claim 4, it has been shown that Ikeda fails to teach or suggest the recording/reproducing device according to claim 1. For example, Ikeda fails to teach or suggest means for reading data from the recording medium while also recording data onto the medium. Sako also fails to teach or suggest this feature. Claim 4 is dependent on claim 1 and incorporates all of the limitations therein. Therefore claim 4 is patentable over this combination of references for at least this reason.

With regard to claim 10, neither Ikeda nor Sako teach or suggest "setting means for setting at least one of an exhaustion limit value parameter and a frequency limit value parameter of collective readout for said readout of said data by said readout means in accordance with a communication speed." In light of Applicant's specification, the exhaustion limit value and the frequency limit value cannot be interpreted as analogous to the focusing signals used to control the servo of Sako. As described in Applicant's specification, these limit values (**kr0** and **mf0**) are used, for example, to control the data readout process. (Applicant's specification, Fig. 13)

Adjusting these values will affect the frequency of executing the "inner loop" of the readout process (i.e., steps **S32 – S38**), as shown in Figs. 13 and 15. The servo control signals of Sako, used merely to control the tracking of the laser across the disc surface, cannot reasonably be interpreted as suggesting these features. Therefore this claim is patentable over these references for at least this reason.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 4 and 10 under 35 U.S.C. § 103(a).

Claim 11 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ikeda, in view of Sako, and in further view of U.S. Pat. No. 5,995,704 to Shido ("Shido"). This rejection is traversed.

Shido describes a method for recording data on a medium using a hierarchical representation of the data at several resolutions. (Shido, 5:45-6:54, and Figs. 6A, 6B, 7). This allows a user to read back the data at different resolutions, depending on the available time for a reading operation. (Shido, 3:1-4). Shido, even viewed in combination with Ikeda and Sako, fails to teach or suggest all of the features of Applicant's claim.

For example, none of these references teach or suggest "selection means for allowing a user to arbitrarily select at least one of an exhaustion limit value parameter and a frequency limit value parameter of collective readout for said readout of said data by said readout means." Shido may teach a means for a user to input some type of control value. However, neither the control values in Shido nor the control values in Sako can reasonably be said to suggest the claimed exhaustion and frequency limit values. The user-input control values described in Shido merely control the desired output resolution of the read-out information. (Shido, 7:14-23, 8:26-29). This is not analogous to the claimed limit values whose functionality is described in Applicant's specification. Therefore this claim is patentable over this combination of references for at least this reason.

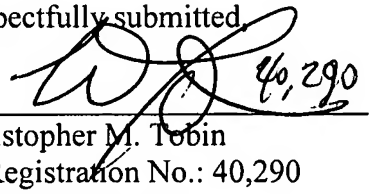
Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. § 103(a).

In view of the above amendment, applicant believes the application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SON-2968 from which the undersigned is authorized to draw.

Dated: November 27, 2007

Respectfully submitted,

By 
40,290

Christopher M. Tobin
Registration No.: 40,290
Ronald P. Kananen
Registration No.: 24,104
RADER, FISHMAN & GRAUER PLLC
Correspondence Customer Number: 23353
Attorney for Applicant